REMARKS

Applicant respectfully requests further examination and reconsideration in view of the arguments set forth fully below. Claims 1-69 were previously pending in this Application. Within the Office Action, Claims 1-69 have been rejected. Accordingly, Claims 1-69 are now pending in the application.

Rejections Under 35 U.S.C. § 103

Within the Office Action, Claims 1-69 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application Publication No. 20010003526 to Kanehara (hereinafter "Kanehara") in view of U.S. Patent No. 6,523,696 to Saito et al. (hereinafter "Saito"). The Applicant respectfully disagrees.

Kanehara teaches a packet processing apparatus and method. Kanehara teaches a method for changing an IP communication to be sent by asynchronous over to an IP communication to be sent by isochronous transfer in accordance with a traffic state in data transfer on the IEEE 1394 serial bus. [Kanehara, ¶ 0032] Kanehara teaches that when traffic on a LAN is large, change-over of the transfer system from the asynchronous transfer as the connectionless communication is performed in such a manner that data transfer is performed by isochronous transfer as the connection-oriented communication with the assured band. [Kanehara, ¶ 0033] As is recognized by the Office Action, Kanehara does not teach sending the packets *over a non-isochronous* compliant network. Kanehara also does not teach encapsulating one or more isochronous data packets according to a real-time transport protocol data packet.

Regarding encapsulating one or more isochronous data packets according to a real-time transport protocol data packet, the Paragraphs 38, 56 and 72 of Kanehara are cited within the Office Action. Paragraph 38 simply states "[a]n application section 101 includes an application in which a file transfer protocol (FTP) and a real time protocol (RTP) are used, and performs data input/output with an IP packet processor 102." [Kanehara, ¶ 0038] Although the RTP is mentioned, there is nothing in Paragraph 38 that teaches encapsulating one or more isochronous data packets according to a real-time transport protocol data packet. Furthermore, Paragraphs 56 and 72 of Kanehara add nothing in terms of teaching encapsulating one or more isochronous data packets according to a real-time transport protocol data packet. Therefore, Kanehara does not teach encapsulating one or more isochronous data packets according to a real-time transport protocol data packet.

Furthermore, Kanehara does not teach a network of devices. Specifically, Kanehara does not teach a second isochronous compliant network coupled to the receiving device. Figures 1 and 2 of Kanehara only show an IEEE 1394 packet transmitter and receiver and a gateway. Within the Office Action, the transmitter 109 is cited as teaching the claimed transmitter as well as the first isochronous compliant network. The gateway 204 is cited as the claimed second isochronous compliant network coupled to the receiving device. Furthermore, paragraph 28 of Kanehara is cited. Paragraph 28 of Kanehara teaches:

> Here, a physical cable for connecting the respective apparatuses to one another is an IEEE 1394 serial bus or another bus provided with two connection-oriented and connectionless transfer systems. Moreover, the physical cable for connecting the respective apparatuses of the gateway of the LAN is an IEEE 1394 bus or another bus provided with two connection-oriented and connectionless transfer systems, and is connected to an external network via the gateway 204. [Kanehara, ¶ 28]

However, there is nothing in Paragraph 28 which teaches a second isochronous compliant network coupled to the receiving device. Kanehara simply does not teach multiple isochronous compliant networks.

In contrast, some embodiments of the present invention are directed to a first network which is an isochronous compliant network, including one or more network devices. A second network is an isochronous compliant network including one or more network devices. The first isochronous compliant network and the second isochronous compliant network are coupled together via a non-isochronous compliant network. [Present Specification, Page 10, Line 26 through Page 11, Line 15 and accompanying Figure 3]

Saito teaches a communication control device capable of realizing a uniform service providing environment without relying on a particular network. The communication control device is connected with first and second networks and has a collecting unit for collecting service information of service providing devices connected with the first network, according to a first protocol depending on the first network, and a notifying unit for notifying the service information to a device connected with a second network, according to a second protocol not depending on the first network. [Saito, Abstract] However, Saito does not teach encapsulating one or more isochronous data packets according to a real-time transport protocol data packet. Thus, neither Kanehara, Saito nor their combination teach encapsulating one or more isochronous data packets according to a real-time transport protocol data packet. Saito also does not teach a second isochronous compliant network coupled to the receiving device.

In contrast to the teachings of Kanehara, Saito and their combination, the real-time transport protocol for transporting isochronous data packets over a non-isochronous compliant network of the present invention includes a payload format for transporting IEC 61883-1 CIP compliant IEEE 1394-2000 isochronous transport data. In some embodiments, the transport data includes a stream format, such as DV (Digital Video), AM824 (Audio/Music data format with an 8-bit header and 24 bits of audio), or MPEG, that has been packetized for isochronous transport by a source. The payload format is opaque to the transport mechanism. The isochronous transport clock is derived from the IEEE 1394-2000 cycle timer clock. In some embodiments, the real-time transport protocol is used to transport IEEE 1394-2000, IEC 61883 compliant data streams between IEEE 1394-2000 buses using IP (Internet Protocol), specifically, Ethernet/IP. Alternatively, other IP formats are used. Utilizing this real-time transport protocol, isochronous data packets are encapsulated to from a real-time transport protocol data packet which is sent over a non-isochronous compliant network. As described above, Kanehara, Saito and their combination do not teach encapsulating one or more isochronous data packets according to a real-time transport protocol data packet. Kanehara, Saito and their combination also do not teach a second isochronous compliant network coupled to the receiving device.

The independent Claim 1 is directed to a method of communicating data streams. The method of Claim 1 comprises packetizing one or more data streams into isochronous data packets, encapsulating one or more isochronous data packets according to a real-time transport protocol to form a real-time transport protocol data packet and sending the real-time transport protocol data packets from a transmitting device to a receiving device over a non-isochronous compliant network. As described above, Kanehara, Saito and their combination do not teach encapsulating one or more isochronous data packets according to a real-time transport protocol data packet. For at least these reasons, the independent Claim 1 is allowable over the teachings of Kanehara, Saito and their combination.

Claims 2-14 are all dependent on the independent Claim 1. As described above, the independent Claim 1 is allowable over the teachings of Kanehara, Saito and their combination. Accordingly, Claims 2-14 are all also allowable as being dependent on an allowable base claim.

Furthermore, Claim 2 further specfies that the transmitting device is coupled to a first isochronous compliant network and the receiving device is coupled to a second isochronous compliant network. As described above, Kanehara, Saito and their combination do not teach a second isochronous compliant network. For at least these additional reasons, Claim 2 is allowable over the teachings of Kanehara, Saito and their combination.

Claim 13 further specifies that the real-time transport protocol header which includes a timestamp, the timestamp defined by a value of the isochronous cycle start transaction corresponding to the receipt of a first isochronous data packet included in a particular real-time transport protocol data packet. Within the Office Action, the "packet flag" of Kanehara is cited. However, there is nothing in Kanehara that equates the "packet flag" with the real-time transport protocol header which includes a timestamp, the timestamp defined by a value of the isochronous cycle start transaction corresponding to the receipt of a first isochronous data packet included in a particular real-time transport protocol data packet. For at least these additional reasons, Claim 13 is allowable over the teachings of Kanehara, Saito and their combination.

The independent Claim 15 is directed to an apparatus for communicating data streams. The apparatus of Claim 15 comprises means for packetizing one or more data streams into isochronous data packets, means for encapsulating one or more isochronous data packets according to a real-time transport protocol to form a real-time transport protocol data packet and means for sending the real-time transport protocol data packets from a transmitting device to a receiving device over a non-isochronous compliant network. As described above, Kanehara, Saito and their combination do not teach encapsulating one or more isochronous data packets according to a real-time transport protocol data packet. For at least these reasons, the independent Claim 15 is allowable over the teachings of Kanehara, Saito and their combination.

Claims 16-28 are all dependent on the independent Claim 15. As described above, the independent Claim 15 is allowable over the teachings of Kanehara, Saito and their combination. Accordingly, Claims 16-28 are all also allowable as being dependent on an allowable base claim.

Furthermore, Claim 16 further specifies that the transmitting device is coupled to a first isochronous compliant network and the receiving device is coupled to a second isochronous compliant network. As described above, Kanehara, Saito and their combination do not teach a second isochronous compliant network. For at least these additional reasons, Claim 16 is allowable over the teachings of Kanehara, Saito and their combination.

Claim 27 further specifies that the real-time transport protocol header includes a timestamp, the timestamp is defined by a value of the isochronous cycle start transaction corresponding to the receipt of a first isochronous data packet included in a particular real-time transport protocol data packet. Within the Office Action, the "packet flag" of Kanehara is cited. However, there is nothing in Kanehara that equates the "packet flag" with the real-time transport protocol header includes a timestamp, the timestamp is defined by a value of the isochronous cycle start transaction corresponding to the receipt of a first isochronous data packet included in a

particular real-time transport protocol data packet. For at least these additional reasons, Claim 27 is allowable over the teachings of Kanehara, Saito and their combination.

The independent Claim 29 is directed to an apparatus to communicate data streams. The apparatus of Claim 29 comprises a transmitting circuit configured to encapsulate one or more first isochronous data packets according to a real-time transport protocol, thereby forming a first real-time transport protocol data packet, and to transmit the first real-time transport protocol data packets over a non-isochronous compliant network and a receiving circuit configured to receive a second real-time transport protocol data packet from the non-isochronous compliant network, and to de-encapsulate the received second real-time transport protocol data packets into one or more second isochronous data packets. As described above, Kanehara, Saito and their combination do not teach encapsulating one or more isochronous data packets according to a real-time transport protocol. For at least these reasons, the independent Claim 29 is allowable over the teachings of Kanehara, Saito and their combination.

Claims 30-42 are all dependent on the independent Claim 29. As described above, the independent Claim 29 is allowable over the teachings of Kanehara, Saito and their combination. Accordingly, Claims 30-42 are all also allowable as being dependent on an allowable base claim.

Furthermore, Claim 37 further specifies that the real-time transport protocol header includes a timestamp, the timestamp is defined by a value of the isochronous cycle start transaction corresponding to the receipt of a first isochronous data packet included in a particular real-time transport protocol data packet. Within the Office Action, the "packet flag" of Kanehara is cited. However, there is nothing in Kanehara that equates the "packet flag" with the real-time transport protocol header which includes a timestamp, the timestamp defined by a value of the isochronous cycle start transaction corresponding to the receipt of a first isochronous data packet included in a particular real-time transport protocol data packet. For at least these additional reasons, Claim 37 is allowable over the teachings of Kanehara, Saito and their combination.

The independent Claim 43 is directed to a network of devices to communicate data streams. The network of devices of Claim 43 comprises a transmitting device configured to encapsulate one or more isochronous data packets according to a real-time transport protocol, thereby forming a real-time transport protocol data packet, and to transmit the real-time transport protocol data packets, a first isochronous compliant network coupled to the transmitting device, a receiving device configured to receive the real-time transport protocol data packets, a second isochronous compliant network coupled to the receiving device and a non-isochronous compliant network coupled to the first isochronous compliant network and the second isochronous compliant network to transmit the real-time transport protocol data packets from the transmitting

device to the receiving device. As described above, Kanehara, Saito and their combination do not teach encapsulating one or more isochronous data packets according to a real-time transport protocol. Kanehara, Saito and their combination also do not teach a second isochronous compliant network coupled to the receiving device. For at least these reasons, the independent Claim 43 is allowable over the teachings of Kanehara, Saito and their combination.

Claims 44-57 are all dependent on the independent Claim 43. As described above, the independent Claim 43 is allowable over the teachings of Kanehara. Accordingly, Claims 44-57 are all also allowable as being dependent on an allowable base claim.

Furthermore, Claim 52 further specifies that the real-time transport protocol header which includes a timestamp, the timestamp defined by a value of the isochronous cycle start transaction corresponding to the receipt of a first isochronous data packet included in a particular real-time transport protocol data packet. Within the Office Action, the "packet flag" of Kanehara is cited. However, there is nothing in Kanehara that equates the "packet flag" with the real-time transport protocol header which includes a timestamp, the timestamp defined by a value of the isochronous cycle start transaction corresponding to the receipt of a first isochronous data packet included in a particular real-time transport protocol data packet. For at least these additional reasons, Claim 52 is allowable over the teachings of Kanehara, Saito and their combination.

The independent Claim 58 is directed to a method of communicating data streams. The method of Claim 58 comprises packetizing one or more data streams into IEEE 1394 compliant isochronous data packets, encapsulating one or more IEEE 1394 compliant isochronous data packets according to a real-time transport protocol to form a real-time transport protocol data packet and sending the real-time transport protocol data packets from a transmitting device to a receiving device over a non-isochronous compliant network. As described above, Kanehara, Saito and their combination do not teach encapsulating one or more isochronous data packets according to a real-time transport protocol. For at least these reasons, the independent Claim 58 is allowable over the teachings of Kanehara, Saito and their combination.

Claims 59-69 are all dependent on the independent Claim 58. As described above, the independent Claim 58 is allowable over the teachings of Kanehara. Accordingly, Claims 59-69 are all also allowable as being dependent on an allowable base claim.

Furthermore, Claim 67 further specifies that the real-time transport protocol header which includes a timestamp, the timestamp defined by a value of the isochronous cycle start transaction corresponding to the receipt of a first isochronous data packet included in a particular real-time transport protocol data packet. Within the Office Action, the "packet flag" of Kanehara is cited. However, there is nothing in Kanehara that equates the "packet flag" with the real-time transport

protocol header which includes a timestamp, the timestamp defined by a value of the isochronous cycle start transaction corresponding to the receipt of a first isochronous data packet included in a particular real-time transport protocol data packet. For at least these additional reasons, Claim 67 is allowable over the teachings of Kanehara, Saito and their combination.

For the reasons given above, the applicant respectfully submits that the claims are now in a condition for allowance, and allowance at an early date would be appreciated. Should the Examiner have any questions or comments, they are encouraged to call the undersigned at (408) 530-9700 to discuss the same so that any outstanding issues can be expeditiously resolved.

Respectfully submitted,
HAVERSTOCK & OWENS LLP

Dated: April 4, 2008

By: /Jonathan O. Owens/

Jonathan O. Owens
Reg. No. 37,902
Attorneys for Applicant(s)